CHESHIRE COUNTY COUNCIL.

EDUCATION COMMITTEE.

REPORT

OF THE

Chief School Medical Officer

FOR THE YEAR

1928

BY

MEREDITH YOUNG,

M.D., D.P.H., D.S.Sc.,
Of Lincoln's Inn, Barrister-at-Law,
Lecturer in School Hygiene, Victoria University of Manchester.

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MEDICAL INSPECTION.

STAFF.

School Medical Officer:
Meredith Young, M.D., D.P.H., &c.

Assistant Medical Officers:
A. V. Stocks, M.A., M.B., Ch.B., D.P.H.
W. J. McIvor, B.A., M.B., Ch.B., D.P.H.
Jenny C. King, M.B., Ch.B.
Mary Sheridan, M.B., Ch.B.

Ophthalmic Surgeons:
E Nicholas Hughes, M.R.C.S., L.R.C.P., D.O.M.S., (R.C.P.S.)
Cyril Jacobs, M.B., B.S.

School Dentists:
S. Whitworth, L.D.S.
S. O. Stewart, L.D.S.
H. R. Parry, L.D.S.
E. S. Butt, L.D.S.
Leonard N. Alley, L.D.S.

Health Visitors: 37.

Dental Nurses: 5.

Superintendent Clerk:
Vincent O'Connor.

CHESHIRE COUNTY COUNCIL.

EDUCATION COMMITTEE.

INTRODUCTION.

To the Chairman and Members
of the Education Committee.

MR. CHAIRMAN, LADIES AND GENTLEMEN,

I beg to present my Report on the work done under your scheme for medical inspection and treatment of school children during the year 1928.

I beg to draw your particular attention to that part of the report which deals with treatment and to the tables at the end in which actual figures shew the extent of this. The scheme has continued to work satisfactorily but needs further improvement before it can fairly be called complete. In particular there is a need for an additional Medical Inspector so as to enable every scholar in the special age groups to be examined at least once a year and to permit of the fuller examination of special cases and the re-examination at regular periods of children already found to be defective.

I hope to extend the system of Minor Treatment Centres in such a manner as not to involve any really serious expenditure.

I am grateful to your Committee for the kind and careful consideration you have always given to my proposals and to all those who have co-operated so cordially in the work—particularly to the teaching profession.

I have the honour to be,
Mr. Chairman, Ladies and Gentlemen,
Yours obediently,
MEREDITH YOUNG.

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CHESHIRE COUNTY COUNCIL

EDUCATION COMMITTEE.

ANNUAL REPORT

OF THE

CHIEF SCHOOL MEDICAL OFFICER

for 1928.

Extent of Inspection.

The following figures shew the gross numbers of children inspected :—

		Number examined.
Code Group Inspections	Entrants	6,238
	Intermediates	6,557
	Leavers	4,969
	Total ...	17,764
No. of other Routine Inspections		625
Special Inspections		6,492
Re-Inspections		2,809
		9,301
	Grand Total ...	27,065

Co-ordination.

The whole of the work which directly or indirectly affects the health of the County is now co-ordinated under a central administration—an arrangement which ensures completeness, smoothness, efficiency and economy.

Co-operation of Parents and Teachers.

As always teachers have done everything in their power to facilitate the work of inspection and to co-operate with the Medical Inspectors and Health Visitors. Parents are taking a much greater interest in the scheme as is evidenced by the following remarks of Dr. A. V. Stocks—which are echoed by all the other Medical Inspectors.

"The growing interest of the parents is shown by the fact that during the year 1928, in the area for which I am responsible, the proportion of parents attending at the routine inspection of the school children has been 58 per cent., the actual number being 2,900 parents for 5,000 children. This percentage is twice that for 1922, each year having shown a steady increase in the interval. Many parents ask if other members of the family at school, who are not in the "Code" groups, can be examined as "special" cases and whenever possible their request is granted.

"The Teachers have been of the very greatest assistance during the year, especially the Head Teachers, upon whom the large amount of clerical work mainly falls. They have been most helpful in preparing the medical cards, arranging for the parents to come, weighing and measuring the children, selecting 'special' cases, and giving the benefit of their own personal observations of a child's behaviour and appearance in school."

Dr. Mary Sheridan reports :—

"The parents, for the most part, now understand more fully the aims of Medical Inspection, and they attend very satisfactorily. A few refusals are met with, and I always try to get these *in writing*, to impress upon the children—and the mothers—that their refusal is no light matter and is put on record. Many of them withdraw the objection when they are asked to sign a paper. In the Aldford—Farndon area nearly one-third of the children due for examination were withdrawn. Signed notes were sent in every one of these cases. This kind of thing indicates something in the nature of an organised opposition. In most areas parents are only too willing for their children to be seen. Indeed in one school of 150 girls no less than 27 (other than routine cases) *requested* re-examination. In the course of three years the children have come to know me, and in many cases the parents also."

Hygienic Condition of Schools.

Regular Follow-up reports are received on the sanitary condition of all schools and where improvements are needed a note of these is transmitted through the Director of Education to the Managers concerned. It is only rarely that any drastic action by this Department is necessary. Dr. Stocks mentions a matter which affects more schools than the one to which he refers and it is hoped that special consideration will be given to his remarks.

"The facilities for washing in many schools leave a great deal to be desired. It is here that there is the most marked difference between what the child is taught verbally in school and what it absorbs, almost unconsciously, from its school environment. It is an excellent piece of propaganda to put up the brightly coloured posters of the "Health and Cleanliness Council" on the school walls, but the effect is a little marred when in one of our most up-to-date Council Schools we find five wash basins and *one towel* for the use of 240 boys aged ten years and upwards. In spite of a report to the local sub-committee nothing has been done to remedy this state of affairs."

Malnutrition.

Dr. Jenny C. King reports as follows under this heading:

"The following figures represent the number of children between 5 and 12 years of age classified under the heading of *Malnutrition and General Debility*:—

	Entrants.	Inters.	Leavers.
Girls—35	11	18	6
Boys—61	18	25	18

Total 96 or 2 per cent. of all children examined.

"In all these cases the malnutrition and debility was marked. The children were pale, poorly developed, under weight, lacking in energy and in many cases backward in school work. In the majority of these cases the poor state of health was attributed to some definite cause such as:—

(1) Anæmia.
(2) Bronchitis or Asthma.
(3) Neglected Tonsil and Adenoid enlargement.
(4) Debility following Scarlet Fever, Measles or other Infectious Fever.
(5) Some chronic source of infection, *e.g.*, bad teeth or otitis media suppuration.
(6) Under nourishment—(insufficient food or the wrong kind of food).
(7) Poor home conditions—badly ventilated rooms, over-crowding, late bedtime, unhealthy surroundings.

"All cases were advised regarding treatment depending on the cause.

"It is obvious from the figures that the school boy between 5 and 12 years of age (and more especially between 5 and 8 years of age) is a more delicate individual than the school girl of the same age."

Dr. A. V. Stocks reports that "the proportion of the children examined at the routine inspections who were found to be suffering from this was 3.7 per cent. and that the proportion is slightly higher in urban than rural schools."

Dr. Mary Sheridan's remarks are as under :—

"I have found 93 children in my area whom I have noted as 'thin and pale,' who were definitely sub-normal in general health, but not sufficiently so to be grouped under the 'Delicate Children' section. Many of them had recently been absent with an acute illness. Some came from poor or unsuitable homes. Many of them had insufficient sleep—a very common thing I find—or were allowed too much excitement, or lived on improper diets. General hygienic treatment and tonics were advised.

Average for 1928, 2.08 per cent.

Average for 1927, 2.8 per cent.

Average for 1926, 3 per cent."

Uncleanliness.

I append extracts from the reports of the Medical Inspectors.

Dr. Mary Sheridan :—

"Total 8.1 per cent. of all cases; 43 boys, 416 girls.

"Uncleanliness of the body is not seen so often as unclean heads are because the children are usually bathed in preparation for my visit. If they were not warned the *boys*' numbers would be very much larger, since they are usually less particular about washing than the girls. The percentage of *unclean heads* amongst *girls only* is 15.5 per cent. (last year 14.4 per cent.). It is remarkable how the percentages differ in different areas. In the country schools I have found that the children on the whole are *very much* cleaner than in the urban areas. The urban areas also differ considerably. Taking *all girls* (infants to seniors) in New Ferry area, one finds there is 15.8 per cent. of uncleanliness, whereas in Ellesmere Port the figure is 21.8 per cent. Even from school to school in the same area the numbers differ.

"In every case where nits were present, even in the smallest numbers, notes were sent home."

Dr. King :—

"The number of dirty heads found among the girls was disgraceful.

Girls only.

780 Entrants, 15.4 per cent. dirty heads.
766 Intermediates, 22.2 per cent. dirty heads.
689 Leavers, 17.9 per cent. dirty heads.
i.e., 18 per cent. of all girls examined.

"The short hair fashion does not seem to have made very much difference. The yearly visits by the doctor and the frequent visits by the School Nurse are not sufficient to keep the children's heads in a clean state. The teachers in all schools should be authorised to have regular inspections of the children's heads and exclude all bad cases. There are many parents who will not attempt to clean their child's head until she has been excluded from school and forbidden to return until the hair is quite clean. This would probably affect the attendance at times but the result would be worth it."

Dr. Stocks :—

"There is a distinct improvement in this respect as the following table will show :—

Year.		Number at routine inspections.		Per cent. not clean.	
		Unclean head.	Unclean body.	Head.	Body.
1921 (from Annual Report).		—	—	9.6	—
1921	(own observation)	260	—	6.3	—
1924		203	241	3.9	4.8
1926		177	171	3.4	3.3
1928		86	164	1.7	3.3

"*Clothing Defects.*

Dr. Sheridan reports as under on this subject :—

	Boys.	Girls.
Total 1.13 per cent. ...	36 ...	28

"The defects noted were principally ragged or dirty clothing, and broken boots. Many parents never dream of repairing their children's garments when they have become torn, or lost buttons, and the bigger girls who might look to these things themselves have not been trained to be thrifty. I have been told that a big girl who had very ragged underclothing was one of the best sewers in the class. Very often one sees all the undergarments held together by pins. Where the knicker elastic has snapped the child wraps the garment round the waist and clamps a huge untidy fold together with a large pin. Should it become undone, or the child fall in the playground, the pin could easily cause a serious punctured wound in the abdomen.

"Insufficient clothing is seen, but is not usual. Excessive clothing is very common, indeed about half the children are overclothed. I have noted three girls and five boys who were grossly overclad. One of the girls wore nine layers, and one of the boys (seen on a lovely June day) wore a woolly vest, woolly combinations, a flannel shirt, and three knitted jerseys.

"Averages for other years:—1926, 1.5 per cent.; 1927, 1.7 per cent."

Skin Diseases.

On this subject I append the special remarks of some of the Medical Inspectors.

Dr. Stocks:—

"At the routine inspections out of 5,000 children only 50 suffered from impetigo (compared with 88 in 1927 and 69 in 1926), and only eleven from ringworm. No cases of scabies were seen.

"It may be recalled that in 1911 Dr. Gibson reported for his area of Cheshire 55 cases of ringworm and 21 of scabies.

"In my opinion the marked decrease in these ailments is due to the increasing knowledge of the parents and teachers as to the nature and treatment of these skin conditions, and their mode of spread and prevention, due to our leaflets and visits by Health Visitors to homes and schools; also in no small degree to the Minor Ailments Clinics."

Dr. King:—

"*Skin Diseases* were found in 1.9 per cent. of all cases as under:—

Ringworm—Body		4
	Head	10
Seborrhœa—Body		9
	Head	5
Psoriasis		4
Alopecia		3
Impetigo (marked)		22
Dermatitis		16
Herpes		2
Acne		5
Multiple Warts		6

"One of the cases of Alopecia was very marked. The child was completely bald. In April, 1927, artificial sunlight treatment was recommended and given. When seen again in March, 1928, there was a thick growth of hair all over the head."

Dr. Sheridan :—

"The following skin diseases were discovered in my area :

	Boys.	Girls.
Total 1.4 per cent. ...	35 ...	41

"The commonest condition was impetigo (boys 38, girls 22). Where the disease was present on any exposed part the child was excluded. Others were allowed to remain as long as the patches were covered and not spreading. Other conditions noted :—

	Boys.	Girls.
Scabies (excluded) ...	3 ...	–
Ringworm (excluded) ...	1 ..	4
Psoriasis	3 ...	3
Ichthyosis	2 ...	4
Acne	– ...	2
Eczema	2 ...	4
Urticaria	2 ...	–
Numerous Warts ...	1 ...	–
Lichen Urticatus ...	1 ...	–
Lupus (not severe) ...	1 ...	1

"Medical supervision was advised in all cases.

"Average for 1927, 1.6 per cent.

"Average for 1926, 1.4 per cent."

Eye Diseases and Defects of Vision.

Dr. Nicholas Hughes reports as follows :—

"1,427 School children were examined during the year 1928 in 161 sessions.

"The following is a classified list of the principal refractive errors and eye diseases discovered :—

	Boys.	Girls.
Hypermetropia	43	50
Hypermetropic Astigmatism	146	165
Myopia	23	49
Myopic Astigmatism	38	46
Mixed Astigmatism	11	17
Right Convergent Concomitant Strabismus	27	22
Left Convergent Concomitant Strabismus	35	43
Alternating Convergent Concomitant Strabismus	5	3
Divergent Strabismus	2	7
To wear own Glasses	59	90
Glasses not required	136	164
Blepharo-Conjunctivitis	1	3
Blepharitis	24	19
Conjunctivitis (Catarrhal)	2	4
Conjunctivitis (Follicular)	6	6
Conjunctivitis (Muco-purulent)	3	—
Corneal Ulcer	4	3
Corneal Nebulæ	6	20
Coloboma Iridis	1	—
Chorio-retinitis (old)	2	1
Hordeolum (Acute)	2	3
Hordeolum (Recurrens)	1	4
Iritis (old)	—	2
Keratitis Phlyctenular	3	6
Macular Retinitis	2	7
Retinitis Tubercular	2	—
Sclerosis of Lachrymal Puncta	5	—
Tarsal Cyst	2	3
"All Infants' Examinations"	24	47

"The above cases were seen in 161 sessions.

"Glasses were prescribed for 738 children, and advice was given to parents whose children were suffering from the eye diseases mentioned in the classified list above. Cases were admitted into hospital under my care, for operation and treatment. The operations included those for squint, tarsal cyst, and trichiases. Treatment cases included corneal ulcers, phlyctenular keratitis, optic neuritis, tubercular retinitis and vitreous hæmorrhage.

"The number of requests from parents to examine their children's eyes in order to make certain of the absence of ocular defects has been considerably greater this year. Moreover parents are attending the examinations in greater numbers. Refusals for eye examinations are now so few as to be negligible.

"A new type of prescription form for spectacles has been adopted, and this together with an explanatory circular letter to the parents has been of the greatest value in inducing the parents to obtain the spectacles.

"Several severe cases of purulent conjunctivitis were seen at Ellesmere Port during the autumn and had to be excluded from school.

"Nine cases of macular retinitis were found and five were investigated with the Gullstrand Binocular Ophthalmoscope.

"Fundus paintings were made for the purpose of record and an article will be published later, on their progress."

Dr. Jacobs writes :—

Number of cases examined during the year ...	1678
Number of cases where no glasses were required ...	725
Number of cases where glasses were prescribed ...	654
Number of cases in which other forms of treatment were prescribed	298
Number of cases of blepharitis	73
Number of cases of conjunctivitis	15
Number of cases of keratitis	2
Number of cases of corneal opacities	42
Number of cases of defective vision due to errors of refraction (excluding squint)	951
Number of cases of squint	219
Number of cases of other conditions	49

"Where necessary, advice was given to teachers on such subjects as the position of desks and blackboards, lighting, posture of children and so forth. In all cases requiring treatment, the parents or guardians of the children were advised accordingly.

"Of the factors concerned in the production of errors of refraction, heredity is by far the most important. This no doubt accounts chiefly for the unusually large number of cases of defective vision found in some localities.

"With regard to the production of myopia, heredity again plays a very important part, but here there are also other factors operating, chief among which are ill-health and excessive close work. It is for example a matter of common experience to find a considerable increase in the degree of myopia after a debilitating illness such as measles or whooping-cough. Excessive close work, especially when the lighting is unsuitable, where the printing is defective or too small.

or where a wrong attitude is adopted, also must be regarded as a potent cause in the production and aggravation of myopia. Books or work should not be held too close to the eyes, and the child should not bend over his work. The light should be of good volume. It should be on the left side, and should not shine in the eyes of the children."

Dr. Stocks reports :—

"Blepharitis.—There were 68 cases at the routine inspections, or 1.3 per cent., the lowest figure I have recorded.

"Conjunctivitis.—There were only eight cases seen in school, also the fewest in any year of which I have records.

"Strabismus was noted in 94 children, about the same as last year.

"Glasses were worn by 145 children out of the 5,000 routine cases.

"Defects of Vision.—435 children out of 5,000 could not read the Snellen test type better than 6/12 with both eyes, or 6/18 with one eye, and unless already under treatment were referred to the Oculist."

Dr. Sheridan reports :—

"*External Inflammatory Eye Diseases.*

	Boys.	Girls.
Total 1.5 per cent.	40 ...	45

"The condition most seen is blepharitis, but conjunctivitis is also fairly common, corneal ulcers only seldom. Notes were sent to all parents, and the child recommended for immediate treatment where necessary. General tonic treatment was also advised since these conditions are usually found in weakly or neglected children.

"Average for 1927, 1.7 per cent.
"Average for 1926, 1.2 per cent.

"*Squint.*

	Boys.	Girls.
Total 1.2 per cent.	27 ...	38

"These numbers include only *untreated* squints. If all the squinting children wearing glasses at the time of examination were counted the numbers would be much larger. Many of these had already been examined by the Oculist, but had not troubled to carry out his advice. In some children the condition had become so serious that operative interference was the only treatment likely to do much good. No case of squint need now go untreated if the parent would only co-operate with the Medical Inspectors. The condition is noted immediately the child comes to school, and each year the Assistant School Medical Officer and the Oculist re-examine him. When any child in the upper classes still has a squint, the parent is almost certainly to blame.

"Average for 1927, 1.9 per cent.

"Average for 1926, 1.3 per cent.

"*Defective Vision.*

	Boys.		Girls.
Total 6.13 per cent.	147	...	198

"These numbers are worked out on *all* routine examinations—including the infants who do not all know enough letters to be tested with type. A few of those who have to be passed over may be defective, but the numbers cannot be far out, since only a small percentage of infants go untested. Most children can *draw* the letters pointed out to them even if they do not know the name or the sound.

"The numbers given above are *untreated* defective visions among *routine* cases. If re-examinations were counted they would be doubled. At least a third of them have been notified before, and examined by the Oculist. Many of the parents are so careless of their children's eyesight that legal proceedings in all cases where glasses have not been obtained would I think be justifiable. Very often when glasses have been provided under the County Scheme the parents will not take the trouble to insist upon their children wearing them. A teacher told me of a case—though it was not in Cheshire—where a girl had such defective vision that she had to come within a few inches of the blackboard before she could read the writing on it. The child had glasses prescribed by the School Oculist, but she never wore them. Her mother instead had her ears pierced and the child wore earrings to improve her sight (an old superstition). That is the kind of ignorance we are up against. In some cases the parents are so ignorant of or so indifferent to the dangers of leaving defective eyesight untreated that they refuse even to have the child's eyes examined. In my opinion, at least, this amounts to criminal neglect.

"For interest's sake I have also kept a note of the *routine* children *wearing glasses* at the examination, and have found that 73 boys and 102 girls had received treatment. Working out the percentages of defective vision among girls and boys one finds as before that the girls outnumber the boys considerably. This has been noted each year as follows :—

	Boys.	Girls.
"Average for 1928	7.5 per cent.	11.2 per cent.
"Average for 1927	7.4 per cent.	10.3 per cent.
"Average for 1926	5.1 per cent.	11.9 per cent."

Dr. King reports :—

"Out of 1,714 intermediates examined 156, or 9.1 per cent., were suffering from defects of vision. Out of 1,326 Leavers 150, or 11.3 per cent., were suffering from defects of vision, *i.e.*, 10.1 per cent. of all children examined between 7 and 12 years of age. Out of these, 25 were markedly shortsighted, *i.e.*, unable to read better than 6/36 on the eye card with either eye. 45 cases of Blepharitis were noted. These responded very well to treatment but there were several cases which were more or less chronic, resulting from neglected treatment and poor home conditions."

Ear Diseases and Defective Hearing.

Dr. Sheridan reports :—

"*Ear Diseases.*

	Boys.		Girls.
Total .4 per cent.	15	...	8

"These are not common, although Otitis Media following Scarlet Fever, Measles, and occasionally Influenza is seen. In a few cases the otorrhœa was probably due to septic adenoids and removal of the source of infection was advised. One child had a chronic mastoid. In all cases the necessity of continued medical supervision was pointed out.

"Average for 1927, .4 per cent.
"Average for 1926, .3 per cent.

"*Deafness.* (Minor Degrees only).

	Boys.		Girls.
Total .5 per cent.	16	...	13

"The standard of normal hearing is to detect a whisper with each ear separately at a distance of 20 feet. The children noted here heard at *less than 15 feet* but *more than 5 feet.* (Only hearing at less than 5 feet is 'partial deafness.')

"Most of these children had enlarged adenoids. Some of them gave a history of old Otitis following Scarlet Fever. *One* boy had deafness following an operation for acute mastoid. Usually the operation in children does not affect the hearing at all.

"Average for 1927, .4 per cent.
"Average for 1926, .6 per cent."

Dr. King remarks that "It is interesting to note here the number of children suffering from *Chronic Otitis Media (Suppuration)*:—

54 cases were found, 36 being boys.
13 of these cases were definitely due to adenoid enlargement. The other 41 were the result of:—

1. Uncleanliness and low state of health.
2. Neglected sore throats and bad colds.
3. Sequelæ of some infectious fever, especially measles.

"Very few cases of Chronic Otitis Media are treated in the correct way. Many poorer class mothers regard a 'running ear' as something fairly natural that can't be helped. They put a piece of cotton wool in the child's ear and think that there the treatment ends. If the importance of daily syringing of the ears in these cases was impressed on the parents (provided, of course, that any outstanding defect, such as adenoids had been attended to), the incidence of chronic, bad smelling 'running ears' would be very much smaller.

"In the better class schools there are very few cases of Otorrhœa and in Secondary schools it is unusual to find a single case. The reason for this is that in homes where the rules of personal cleanliness are strictly observed and any physical defect arising is quickly attended to, a middle ear suppuration is seldom allowed to develope into a chronic ear discharge from a perforated ear drum, and if a perforation does occur the discharge is soon cleaned up by the simple but regular treatment of daily syringing."

Nose and Throat Conditions.

Dr. Mary Sheridan reports as follows under this heading:—

"*Enlarged Tonsils and Adenoids.*

	Boys.	Girls.
Total 7.2 per cent. ...	203 ...	200

"This condition is very common in elementary school children, especially in the lower forms where (according to some rough notes) every seventh child is affected. All the usual associated conditions, nasal obstruction, mouth breathing, nasal catarrh, frequent colds and sore throats, bronchitis, deafness, dulling intellect, nasal speech, etc., are seen in varying degrees of severity. All cases were advised to have the operation performed as soon as possible. The 'enucleation' operation now usual shows better results than the 'guillotine' operation, which in a few cases is followed by hypertrophy of remaining pieces of tonsil and return of the associated symptoms. One mother told me her child had had his tonsils 'cut' three times. They were not even then totally removed.

"Average for 1927, 7.7 per cent.
"Average for 1926, 7.8 per cent.

"*Mouth Breathing* (without Nasal Obstruction).

	Boys.	Girls.
Total . 7 per cent.	23 ...	14

"I have noted these numbers because they indicate the necessity for teaching the child to breathe correctly after the operation for adenoids has been performed. In *all* these cases though mouth breathing was marked, there was *no* remaining nasal obstruction, *most* of them had been already operated upon. The children breathed incorrectly from habit only. 'Handkerchief drill,' and breathing exercises for all children in school would help them to learn how and why they must keep their nasal passages free. If those who have been operated upon for adenoids are still permitted to breathe incorrectly afterwards, the whole benefit of the operation is lost

"Average for 1927, 0.9 per cent."

Dr. King reports :—

"*Tonsils and Adenoids.*

"Out of 1,606 Entrants 169 required operation, 10.5 per cent., 5.2 per cent. Boys, 5 per cent. Girls.

"Out of 1,714 Intermediates 111 required operation, 6.4 per cent., 3.4 per cent. Boys, 3 per cent. Girls.

"Out of 1,324 Leavers 62 required operation, 4.6 per cent., 2.2 per cent. Boys, 2.4 per cent. Girls.

"There are still many schools where nasal breathing is not taught and insisted upon. I find that most children understand that inspiration must be done with the mouth closed, but they open their mouths for expiration. This could easily be corrected by their teachers."

Dr. Sheridan reports :—

"*Glands in Neck.*

	Boys.	Girls.
"Total .9 per cent.	28 ...	23

"Slight degrees of enlargement are so common among elementary school children as to be practically constant. These numbers indicate only cases of definite enlargement, and were usually associated with carious teeth, unclean heads, septic tonsils, impetigo of face, etc. Some followed recent Scarlet Fever, Measles, or Mumps. (None of this group were due to tuberculosis—these have been noted among the 'exceptional children.') Local treatment and tonics were advised, and the parent warned of the possibility of tuberculosis developing in chronically enlarged glands.

"Average for 1927, 1.3 per cent.

"Average for 1926, 1.6 per cent.

"*Defective Speech.*

	Boys.		Girls.
"Total 1.3 per cent.	44	...	13

"It is noticeable how very much more frequent defects of speech are among boys than among girls. It is difficult to account for this unless what the mothers say about girls being 'quicker' than boys is true. *Stammers* were noted in 15 boys and 3 girls. The others had actual *defects* of *articulation.* The stammers are often among the brightest in the class, but the other type of defect is nearly always associated with mental backwardness, and is consequently very hard to eradicate. The children improve in school, but slowly (except in the case of very small infants where the 'baby speech' is rapidly cured), and the parents, who have learnt to interpret the child's language, usually do not trouble to make him speak correctly. Persisting after six or seven years old the condition is exceedingly difficult to cure.

"Average for 1927, 1.2 per cent."

Teeth.

Dental Reports.

Mr. Whitworth :—

"Below you will find my report on the dental condition found by me during the past year in the Altrincham and Sale Schools under my care. The age group has now increased to 12 and as a result much more work of a permanent nature has now to be undertaken. Also, by reviewing the work done in the past the benefits of the scheme can now be much better observed. There is no doubt in my mind that considerable benefit is being derived by the children. This is proved by the figures shown on my other tables, out of a total inspection of 2,946 inspected, 2,306 were selected for treatment, leaving a total of 640 children who did not require any treatment, a number which, in my opinion, considering the ages is very good, shows clearly the effect of treatment received.

"During the past year I have included in my schools one that has never previously received a visit from a Dental Surgeon. Being only a small school I did all the age groups and the figures show what the conditions are like in schools not receiving treatment and show how necessary it is to include all schools in the scheme as soon as it can possibly be arranged.

"Total inspected 142. Total selected for treatment 128. This leaves a total of only 14 in the whole school who do not require treatment. The actual treatment required was very much in excess of any other school that I came in contact with during the year and the mouths generally were very septic.

"Being something new the parents in this school were naturally opposed to receiving treatment, but after a lot of trouble this was overcome and 120 of these children were actually treated at the Clinic by me. This should benefit the health of the school considerably and perhaps we shall be able to note results in the future.

"The table showing the number of children selected for treatment and how this was received by the parents is also interesting. Out of the total selected 72.6 per cent. were actually treated at the Clinic, 27.1 per cent. refused treatment, the remaining few the parents preferred to take for private treatment.

"During the year I have had a large number of parents to see me and had several meetings arranged with parents. At last I find there is considerably more assistance given and now parents are asking for advice and are very keen on receiving treatment for their children. Most of the opposition to the scheme has now died down and the satisfactory figures above should be kept up.

"The different Head Teachers that I have come in contact with are as a rule pleased to see the Dental Surgeon arrive and have given me the greatest assistance. In one case it was pointed out to me that the attendances had increased and the complaints of staying away with tooth-ache had practically vanished. Teachers can give a lot of valuable assistance, as in the majority of cases, the home conditions are known. I owe a large amount of thanks to the teachers for the assistance they have given me in fighting the opposition of the parents, and in the successful working of the scheme."

Mr. Alley :—

"During the last sixteen months I have introduced the dental scheme into twenty-eight extra schools in my area, and

I am working to include every school during the coming year. I am pleased to report that in practically every instance the Head Teachers have shown great interest in the work.

"My acceptances for treatment work out at 62 per cent., and considering that for a number of the schools this is the first visit from the School Dentist, this figure seems a fair average. I hope to increase it to 75 per cent. next year.

"After the few months' experience I have had of School Dentistry I am amazed at the number of problems it presents. I am forced to the conclusion, however, that the purpose of School Dentistry is not in itself a dental one, but is designed to help in the production of fitness. Education is the fine flower of all our efforts. Mentally and physically the child must remain supple and fresh. He must be saved from the perversion of his instincts. To guide the growth of personality and character is the problem of education."

Mr. Parry :—

"The work of 1928 has been very similar to that of 1927. The number of permanent fillings has increased considerably, but that is natural as one takes on an older age group each year. In the children previously treated, a great improvement was noticed in the cleanliness and general condition of the mouths; this was also pointed out to us by some of the Head Teachers. In the new districts (Neston, etc.), I found the Head Teachers anxious to have the children's teeth attended to, and they gave every assistance to carry out the treatment."

Mr. E. Butt :—

"This year it has been very gratifying on the whole to note the good results of operative work undertaken previously.

"I have noticed that many cases examined this year have been perfectly healthy, both from a dental and physical point of view; whereas, two years ago, the same cases were noticeable for their septic condition and indifferent health.

"In the majority of areas the interest in the scheme is not only maintained, but increasing. In a few schools in the scattered areas of my district the number of acceptances is rather disappointing, the chief difficulty being to get into touch with the parents living at long distances from the schools. On the other hand, however, I am very pleased to find an excellent response from the new schools I have taken over this year. I feel sure that the scheme has been responsible for the additional interest shown in dental hygiene. By now, the majority of children I inspect know the importance of a tooth-brush, which was by no means the case three years ago. I appreciate the co-operation of the staffs at the schools I have attended, which has been of great assistance to me in the past year's work."

Mr. Stewart :—

"During this year 69 schools have been visited and 4,938 children have been inspected. Sixty-five per cent. of the working hours have been spent in operating.

"I am glad to be able to report that the average acceptance for treatment for 1928 has now risen to 52 per cent. as against 46 per cent. for 1927. This ranges from as high as 92 per cent. in one school to as low as 23 per cent. in another. I have formed the opinion that the number of acceptances in a school is a very fair indication of the attitude of the Head Teacher to this branch of our work.

"In his paper read at a Meeting of the Public Dental Officers Group of the British Dental Association on 17th November, 1928, Dr. H. C. T. Langdon, Medical Officer to the Board of Education, speaking on "Some Problems of School Dentistry," states :—'Some time ago I sent out a questionnaire to a number of school dentists, asking them for their opinion on the following questions : Who has the most influence in persuading children that they should come to the clinic for dental treatment ; the doctor, the dentist, the parent, the nurse, or the teacher? I received an almost unanimous reply that it was the *teacher*, and I have no doubt that this is true ; experience generally shows that in schools where the teacher is *keen* on oral hygiene you get a higher percentage of consents, the converse being also generally true.'

"*Prevention of Dental Disease.*—It is at school that children, very largely, acquire right and proper habits, but, unfortunately, so far, no time is set apart in the school curriculum for the *daily* practice of tooth-brush drill, and, until the practice of cleaning the teeth *daily* is made compulsory, a large proportion of our work is rendered futile each year.

"If this method were adopted in all *schools*, it is more than likely that the medical attention now necessary, could be reduced by one-half, (this is borne out by the Insurance Societies who give dental benefit to their Panel patients), and that the suitable food provided for the children would not be contaminated by their dirty, though often otherwise perfect teeth, before any nourishment has been obtained from it, which is at present the case.

“As one well-known school medical officer states :—‘Nobody who has even a rudimentary knowledge of *preventive* medicine will question that the dentistry of children stands absolutely first of all measures *for the suppression of disease.* It is not too much to say that the school dentist performs work for the community more important than that of anybody else, and that the return for the trouble and expense of attending to the teeth of children, pays the highest dividend of any form of human industry.’ ”

Dr. Sheridan :—

	Boys.		Girls.
“Total of decayed teeth 10.7 per cent.	318	...	285

“These numbers include only those children who have *3 or more* decayed. (Some children have 8 or 10 decayed. One boy of six had *all* decayed). If those who had one or two carious teeth were also included the numbers would be increased to 60 per cent. or 70 per cent. (These show very marked contrast to the figures for secondary schools). Although this figure is high the general condition of the teeth is improving. The children are at last beginning to appreciate the necessity for brushing their teeth. The teachers can help enormously in this respect—and they do. The older girls particularly have learnt the improvement clean teeth make in their general appearance, but the boys are still careless. We have yet to teach them the necessity for immediate treatment of dental defects. It is distressing to see among Intermediates (7—8 years) how often the six year old molars are already decayed. In areas which the school dentist inspects the teeth conditions are vastly better than in unvisited areas. We still find mothers who do not think it necessary to look after the first teeth, but the infant teachers by insisting upon clean teeth among the babies, have done splendid work towards eradicating this ignorance. On the whole I think children in elementary schools know more about the anatomy and physiology of dental hygiene than secondary girls do—although they do not practise it so well. The secondary teacher is apt to pre-suppose a knowledge of these matters in her pupil, whereas the elementary teacher, from long experience, knows it is unsafe to pre-suppose knowledge of any health matter among the children she teaches.

“Average for 1927, 11.2 per cent.
“Average for 1926, 9.2 per cent.”

Dr. Stocks :—

“The improvement in the teeth of school children, mainly due to the work of the School Dentists, is shown by the following table which I have compiled as the result of the scrutiny of the records of some 6,000 children in the years indicated.

"I have separated the results for rural and urban areas, and divided the children into four age groups :—

Age.	Area.	1925. Percentage with three or more carious teeth.		1928. Percentage with three or more carious teeth.
4	Urban	29.6	...	26
	Rural	27.5	...	29.3
6	Urban	35.5	...	31.6
	Rural	44.5	...	34.6
8	Urban	26.8	...	20.8
	Rural	59.0	...	30.4
12	Urban	17.0	...	8.5
	Rural	17.6	...	14.1

"As might be expected the figures at 8 and 12 years reflect the improvement more than do the figures for the earlier ages. Children aged 4 do not come under the dental scheme."

Heart Disease.

Dr. King reports as follows under this heading :—

"Severe heart disease was found in 41 cases, *i.e.*, .9 per cent. of all cases. Of these 12 were congenital and 29 acquired.

"*Congenital.*—One case, a boy, aged 9, suffered from marked cyanosis, breathlessness and epistaxis on exertion. He was not attending school.

"*Acquired.*—In one or two of the 29 cases the valvular disease could not be accounted for, but the majority could be traced to some definite cause such as severe attack of scarlet fever or diphtheria or other infectious fever, rheumatic fever, chronic rheumatism or chorea. All these cases are examined yearly at school and are advised to attend their private doctor during the year. In all cases school games are stopped and the parents are told to see that no cycling, skipping or football is done at home. I have found several cases where every precaution is taken in school, but equal care is not observed in the home. This is especially true of the case of boys who play football after school hours."

Dr. Sheridan :—

"*Functional Disease.*

		Boys.		Girls.
"Total .14 per cent.	... ...	4	...	4

"These cases all showed definite but localised mitral systolic murmurs, unassociated with any symptoms of *organic* disease. They were nearly all found in anæmic or weakly children and the condition was presumably temporary as none had been remarked before. Drill was moderated and general tonic treatment advised. The parent in each case was notified."

Dr. Stocks :—

"Heart trouble was noted in 89 cases, of which 56 showed signs of permanent damage to the valves, the remainder being cases of disordered action or functional disturbance."

Lung Conditions.

Dr. Sheridan reports :—

	Boys.		Girls.
"Total .7 per cent.	23	...	16

"These numbers indicate children suffering from chronic mild bronchitis or bronchial catarrh; one girl was said also to have attacks of mild asthma. Very few acute pulmonary conditions are seen in school as the parents keep them at home, but two or three are excluded each term with highered temperature, cough and signs of slight congestion in one of the lungs. General treatment, with cod liver oil, etc., was advised, and medical supervision where necessary.

"Average for 1927, 1 per cent.

"Average for 1926, 1.5 per cent."

Tuberculosis.

Twenty-seven suspected cases of the pulmonary type were noted and referred for observation and treatment. Other tuberculous conditions observed were 17 cases of glands, 5 of bone or joint disease, 5 of skin disease and 9 of various other forms.

Nervous System.

Here one has recorded five cases of epilepsy and eleven of chorea (St. Vitus' dance).

Deformities.

Under this heading Dr. Mary Sheridan reports a number of cases: those in the first category she states were "not serious enough to cause any crippling of child.

	Boys.		Girls.
"Total .5 per cent.	13	...	15

"These are not very common. I have noted the following:—

	Boys.		Girls.
Cleft Palate (untreated, see note below)	1	...	2
Hernia—			
Umbilical	1	...	2
Inguinal	1	...	2
Epigastric	1	...	—
Cysts—			
Submental (once drained) ...	1	...	—
Mid-neck	—	...	1
Shoulder	—	...	1
Dorsum of foot	—	...	1
Bakers	1	...	—
Wry Neck	2	...	1
Lipoma shoulder	1	...	—
Badly deflected nasal septum ...	1	...	—
Nasal polyp	—	...	1
Large naevus	—	...	1
Very unequal pupils and differently coloured eyes	1	...	—
Numerous warts on face ...	—	...	1
Large yellow wart	—	...	1
Undescended testicle	1	...	—
Phimosis	1	...	—

(These last must have been much more numerous, but in these cases the mothers requested advice).

"All these children were advised to see a surgeon for his opinion as to the advisability of operation. Two of the cleft palate cases were interesting. The boy was the illegitimate child of a girl similarly afflicted. One of the girls was 12 years old; she had seen a surgeon when she was 2 years who had advised waiting another year or two. The mother told me she 'couldn't be bothered' going to the hospital again. The N.S.P.C.C. was informed.

"*Rickety Deformities.*

	Boys.		Girls.
"Total 1.01 per cent.	37	...	21

"The number of children showing permanent deformities as a result of rickets in infancy is becoming pleasingly smaller as a result of the good work of Baby Centres and Health Visitors. I have noted the following conditions:—

	Boys	Girls.
Pigeon Chest	26	13
Spine (Scoliosis and Kyphosis)	2	6 (3 very severely)
Head	9	3
Bow Legs	2	0
Knock Knee	2	2
"Pot Belly"	1	2

"Severe forms only are noted here. Slight degrees of bow legs for instance are seen fairly commonly. The mothers are now learning the necessity for having rickety deformities treated by the orthopædic surgeon before school age. Unfortunately the surgeon cannot improve a pigeon chest—which still remains the commonest form of rickets seen in school. Rickets affecting the chest nearly always leaves a life long legacy of bronchitis.

"*Postural Deformities.*

	Boys.	Girls.
"Total 0.8 per cent.	27 ...	24
	Boys.	Girls.
Postural Scoliosis	4 ...	5
Round Shoulders	23 ...	19

"These are principally seen in thin, weakly, or overgrown children. A few simple Remedial Exercises were demonstrated and tonics advised.

"*Other Defects and Diseases.*

Nervous Conditions.

	Boys.	Girls.
Chorea	1 ...	1
Habit Spasm	1 ...	1
Marked Nervous Instability (see note below)	1 ...	—
Other Conditions.		
Facial Paralysis	— ...	1
Effusion on Knee	— ...	1
Ganglion of Wrist	— ...	1
Incisional Hernia	1 ...	—

"The case of nervous instability was interesting. He was a well grown seemingly healthy boy with a very sensible mother. She told me he was very naughty and restless, and given to emotional outbursts. He suffered from night terrors and had definite fine tremors of the fingers and eyelids. A holiday was advised."

Dr. King :—

"The following is a list of Deformities, developmental and otherwise, noted during the year :—

Cleft Palate	3	
Hare Lip	4	
T.B. Calcareous ...	1	All healed but resulting in Deformities.
T.B. Tarsus	1	
T.B. Nose	1	
T.B. Hand	1	
Congenital Eguina Varus ...	1	
Congenital Torticollis ...	1	
Genu Varus	1	
Infantile Paralysis ...	4	
Multiple Deformities (Congenital)	1	
Pecto-Vescical Fistula ...	1	
Congenital Dislocation of Hip	1	
†Spiná Bifida	3	
†Transposition of Viscera ...	1	

† Two interesting cases.

"I.—Case of Transposition of Viscera. Girl, aged 7.

"I examined the child under the routine inspection of Intermediates on 27th April, 1927. Apart from one or two rickety deformities the child appeared quite healthy. I could not hear the heart sounds at the usual places and after trying for some time I noticed the apex beat on the right side. in the 5th interspace, 3 inches from the middle line. The liver dullness was on the left side. The heart sounds were normal. I saw the child again in February, 1928. I then interviewed the mother and persuaded her to take the child to Salford Royal Infirmary to be X-rayed. 30th March, 1928, X-ray report—'Complete transposition of heart and abdominal viscera.' 3rd April, 1928—Electro cardiogram done. Cardiographic report—'Complexes typical of dextrocardia of the true type.'

"II.—Case of Large Spiná Bifida. Girl, aged 6.

"The child was not attending school but was brought specially by the mother for the medical inspection.

"The child was pale and week looking.

"I found a large spiná bifida over the sacral region, about the size of a cocoanut, scaley, bluish in colour, thin walled and fluctuating. The mother said it had been 'as large for years'. Her own doctor had told the mother that the child's life was uncertain, but he had not seen the child for a long time. There was no protection on the swelling except for a piece of lint. As the mother was anxious for the child to attend school I arranged for her to do so, on condition that she had a chair by herself and did not go out to play with the other children.

"I advised the mother to take the child to the Children's Hospital for a special report but I have not heard the report."

Dr. Stocks :—

"The Orthopædic Clinics recently established have been of very great service already in providing advice and treatment for cases of deformity, etc., of many varied kinds, including congenital torticollis, severe scoliosis, infantile paralysis, congenital dislocation of the hip and one or two rare abnormalities."

Enlarged Thyroid.

Dr. Sheridan reports under this heading :—

"Eleven cases, all girls.

"Slight enlargements of the thyroid are common in the upper classes especially among girls. In the cases noted the thyroid was very definitely enlarged, but all of them were apparently physiological and so did not need interference. None showed any pressure symptoms, or tachycardia, although in one case the thyroid was unusually large. They were referred to their own doctor for supervision."

Mental Dulness.

Dr. Sheridan :—

	Boys.	Girls.
"Total 1.2 per cent.	39 ...	29

"These were children who were mentally retarded by one or two years, but not definitely mentally defective. Most of them had been brought forward by the teacher as special cases. Some of them had unsuitable homes; many were in poor physical condition, and some had not been sent to school at the proper age.

"Average for 1927, 2.2 per cent.
"Average for 1926, 2 per cent."

Dr. King :—

"Out of all cases examined by the intelligence tests 17 have been classified as mentally defective, *i.e.*, intelligence quotient under 60 according to Binet-Simon tests.

"With one exception all these children were attending school."

Re-examinations.

Dr. A. V. Stocks reports under this heading :—

"During the year I was able to follow-up 948 children who had been found to have defects at previous examinations. The results on the whole were satisfactory, in that the majority of the parents had taken the advice that had been given and had acted upon it, with beneficial results to the child's health.

"As an example I may quote the results of recently following-up 82 cases of tonsils and adenoids in the Runcorn district. Of the 82, 12 had had no treatment and were unchanged, and 70 had been operated upon at the Cottage Hospital by Dr. Forster.

"As a result varying degrees of deafness (that had existed before operation in 20 cases) were cured or definitely improved in 17, while three were unchanged. Ear discharge was cured in four, improved in one and unaffected in one of the cases.

"Thickness of speech was definitely improved or cured in 18 cases.

"Enlarged glands in the neck had disappeared in four cases, mouth breathing habits in eight cases, while several had ceased to suffer from recurrent sore throats and colds.

"In eight cases marked gain in weight had followed operation and in seven cases very definite improvement in school work was noticed by the child's teacher."

Health Teaching.

Dr. Mary Sheridan offers the following remarks on this subject :—

"Sir George Newman has drawn attention to the importance of teaching Hygiene in school. The children are now being trained in *Health Habits* in nearly all the elementary schools. The teacher holds a cleanliness parade each morning; the children are encouraged to join in 'clean hands' campaigns, and 'ivory castles' leagues, with great benefit to their personal cleanliness; and attractive coloured posters with explanatory rhymes and slogans are displayed in every school. More than this is needed, however, if we are to improve the health of the future nation. The children must learn the *reasons* for these health habits by studying elementary anatomy and physiology, dietetics, etc. It is especially necessary to teach to-day the girls who will become the mothers of to-morrow, and consequently housewifery, home nursing, mothercraft, first aid and dressmaking should, I think, receive far more attention on the time table of a senior girls' school than is usual at present. Only those of us who have worked in hospital Out-Patient Clinics, and in Baby Centres, can know how abysmally ignorant many young women are when they first take upon themselves the responsibilities of marriage and motherhood. Some of the teachers themselves have told me they would like to know more about Hygiene than they do. I know only too well that the present curriculum is overcrowded as it is, but in the interest of the nation at large, Health Teaching will need to figure prominently on the time table in the future."

Treatment.

Your Committee has made many advances in this direction and have made provision on a generous scale for the remedy of defects discovered on medical inspection or otherwise. A brief summary of these measures of 'amelioration' as they were called when the scheme of medical inspection first came into being may not be out of place :—

1. Minor Treatment Centres are now in full work in a number of districts and such chronic and often neglected conditions as impetigo, suppurating ears, ringworm, eczema, small injuries, &c., are systematically treated thereby preventing a great loss of attendance.

2. Orthopædic After-Care Clinics have also been established for the care of cripples, thus saving not merely the cost of long and expensive Institutional treatment but ensuring that crippledom is being prevented and disastrous after-effects are being averted. The coordination of this work with similar activities in the sphere of Maternity and Child Welfare is a sound practical achievement.

3. Dental Clinics either at special Centres or in the schools themselves are saving the teeth and at the same time the general health of thousands of children every year. In a very short time I hope we shall be able to say that every child who leaves school has at least a sound mouth.

4. Eye Clinics are also doing excellent work and when one can record the fact that last year 3,165 children had diseases or defects of the eyes treated it is something to be proud of.

5. The "Tonsil and Adenoid" scheme for remedying obstruction to breathing resulted last year in close

on 900 school children having this defect permanently removed. When one considers the train of physical incapacities that ensues on these conditions—including tuberculosis in the number—we have again cause for great satisfaction.

6. *Tuberculosis.*—There is of course complete provision for the treatment of all forms of tuberculosis in children.

7. *Institutional Treatment.*—Here we have made provision for blind, deaf, dumb, epileptic, feeble-minded, tuberculous and delicate children of all classes who cannot be adequately treated or trained in their own homes. The numbers so dealt with are given in Table III. in the Appendix.

In all these matters your Committee has acted in a generous public spirit at all times. You will be able to say when the children under your charge are leaving school—"Whether we have cultivated their brains to the best possible extent or not remains to be seen but we do know that we have sent them out into the world with sound bodies so far as those bodies can be made sound." I can only repeat the old tag '*Mens sana in corpore sano.*'

National Society for the Prevention of Cruelty to Children.

Northwich Branch.

"Twenty-four cases have been reported to the Society by the Head Teachers and Health Visitors.

"Twenty-two cases were classified as neglect. Two advice sought.

"Two cases of children suffering with defective vision recommended spectacles by School Oculist. County bearing the cost, parents taking no steps to obtain them. Warned and spectacles provided.

"Three cases of children suffering with sores not receiving attention warned and instructed to attend the School Clinic. Children cured.

"Twelve cases of children sent to school dirty for want of ordinary cleanliness. Poorly clothed and shod. Warned, and clothing and boots provided out of Boot Fund and Council of Social Service.

"Two cases of children having no boots to attend school. Parents unable to provide. Boots provided.

"Two cases of boys excused attending school (waiting for Hospital treatment) seen running after motor lorries and picking cinders. Parents warned. Children now received treatment.

"Two cases of children suffering with Harelip and Adenoids recommended treatment. No action taken by parents. Warned. Both cases have been operated on successfully.

"One case of parents frequently leaving the children to look after themselves until late at night. Children seen sitting on the doorstep waiting for the parents. Warned."

A. W. Maddox,
Inspector.

Runcorn Branch.

"I beg to report for your information that during the year the Society have investigated in the Runcorn Branch nine cases, classified as follows:—neglect, 8; neglect and begging, 1.

"Thirty-six children were involved in these complaints, of which 20 were boys and 16 were girls. There were 16 offenders, of which 9 were male and 7 were female. Of this number all were found to be in a much neglected state, but after warning and advice it has been possible to close some of the cases as satisfactory.

"These cases came under the notice of the Society through the following agencies:—Public Health Department, 2; School Medical Officer, 6; School Mistress, 1.

"Thirty supervisions were made on these cases during this period. One case alone has been caused through drink.

"Words of encouragement have been given to parents where an improvement has been noticed.

"There are still 5 of these cases under notice and it is hoped that the parents will take notice of the warning and advice given and improve matters"

Crewe Branch.

"No. of cases, 23; no. of children affected, 58.

"Classification—General neglect, 18; opthalmia, 2; tonsils and adenoids, 1; advice sought, 1; ill-treatment, 1.

"Reported by—Health Visitors, 15 ; Headmaster, 1 ; Headmistress, 1 ; School Attendance Officers, 6.

"Glasses were supplied in both cases of ophthalmia, in one case the help of the Relieving Officer was solicited as the parents could not afford to purchase glasses.

"Four were cases of children excluded from school suffering from sores, now receiving proper care and attention. The parents were warned and instructed to send their children to the School Clinic for treatment.

"Six cases were of children with verminous heads. Parents were warned and instructed how to treat same.

"One case of tonsils and adenoids successfully removed at the Children's Hospital, Manchester.

"One case of advice sought referred by Health Visitor. Wife died leaving man with 7 children all under 12 years, 4 attending school. Housekeeper was found to look after children and keep house. All these cases were warned, some supervised and others are still under supervision. There were no prosecutions."

H. Baldwin,
Inspector.

Wallasey and North Wirral Branch.

"One case, involving neglect of two girls, was satisfactorily dealt with."

East Cheshire Branch.

"I beg to report that during the year three cases of neglect affecting the welfare of five children were reported. The three cases were warned and 12 supervision visits were made with the result that the children's condition was much improved.

"No prosecutions were necessary."

A. Manning,
Inspector.

Altrincham and Sale District.

"The Society had five cases affecting the welfare of 18 children. Twenty-five visits have been made to these families, two of which are still under the supervision of the N.S.P.C.C.

"Three have been closed as satisfactory."

Physical Training Report, 1928.

"In all branches of Physical Training a steady improvement has been general throughout the schools of the County. The ever-growing interest shown by both teachers and scholars has again proved a very noticeable feature of the work. The whole system of physical education with its systematic physical exercises, organised games, swimming, folk dancing, athletic sports, etc., is receiving more comprehensive attention, and has become a more prominent feature of the school curriculum. Classes for Teachers have been held in several districts and have been well attended.

"*Systematic Physical Exercises.*—The tables of exercises given in the Board of Education Syllabus receive regular and systematic attention in almost every school, a weekly minimum of 60 minutes being the general rule. The general quality of teaching is much more satisfactory and has resulted in much keener interest being taken in the work by scholars, especially in those schools in which a few years ago the subject proved dull and uninteresting. General Activity exercises, though showing more thoughtful preparation in some cases, do not as a general rule receive adequate attention; marching and jumping for the cultivation of style are not sufficiently practised. The work of the senior classes is now more adapted to the needs of the children, and teachers are more fully appreciating the value of team work in the organisation of lessons.

"*Organised Games.*—The arrangements for organised games continue to be very satisfactory; practically every senior department and the majority of junior departments arrange a weekly period for these games and have the use of a satisfactory playing field. More attention is being paid to the playing of minor team games of various types, and skill in the technique of games is improving. There are, however, many boys' classes in which attention is confined solely to cricket and football in their seasons, and it is suggested in these cases that team games of easier organisation, which will allow of every boy in a class taking an active part, should be introduced. Such games can often be played in the School playground when the conditions on the school playing field make satisfactory play impossible.

"The permanent marking of school playgrounds for games purposes should be undertaken wherever possible, as such an arrangement considerably simplifies the organisation of team games.

"The supply of games material, though rather limited, is generally satisfactory, and many schools have supplemented their stock by private effort.

"*Folk Dancing.*—There is a great increase in the number of Schools which include folk dancing in the scheme of physical training, and teachers have taken advantage of the facilities afforded by the classes held in many districts by local branches of the English Folk Dancing Society, to acquire more practical knowledge of the subject. This has naturally resulted in an improved standard of work in the schools. At various Folk Dancing Festivals held at certain centres in the County, the all-round proficiency shown by classes which have taken part, has been proved by the number of certificates gained.

"There are, however, a number of mixed schools in which girls only take part in the work, and it is thought that equal opportunities should be given to boys, so that boys and girls might be taught together.

"*Swimming.*—The progress made in swimming reported last year has been well maintained and the results of the season's work have been very satisfactory. The facilities for the teaching of swimming in a county area must necessarily preclude a large number of scholars from attendance at a swimming bath, but good use is being made of all available facilities. The instruction given is, in the majority of classes according to modern methods, and children obtain definite instruction upon each visit to the baths. The congestion which arises through the presence of the public is a serious handicap at some centres. In such cases the practices to be undertaken in the water should be fully explained before the classes leave school. The number of children who learn to swim shows an increase each year, and records show that during the past four years 2,462 boys and 1,732 girls have learnt to swim.

"Successes in life-saving examinations have once more shown a great increase, and the following table shows the progress made since the work was introduced as part of the swimming instruction :—

	Hon. Instructor's Certificate.	Bronze Medallion.	Proficiency Certificate.	Elementary Certificate.
1925	—	9	9	—
1926	2	13	27	6
1927	5	6	35	72
1928	2	24	51	106

(Signed)

M. ALTHAM,

JOSEPH B. HALL."

April, 1929.

Secondary Schools.

Dr. Mary Sheridan has the following interesting report:

"*Numbers.*—The total number of girls examined was 414, and of these 152 (36.7 per cent.) were found to require treatment, principally for very slight defects. In most of the cases the girls were aware of the condition and their parents were arranging for treatment. About half of those suffering from defective vision had not suspected their disability, and several with one or two carious teeth had neglected to tell their parents they needed treatment through disinclination to visit the dentist.

"The girls themselves usually take a keen interest in the Medical Inspection, and several asked to see me on their own initiative. The parents attend in increasing numbers. They are grateful for suggestions on health matters, and usually most careful to carry out the recommendations given.

"*Clothing.*—Gymnasium slips are worn as uniform in all schools. The underwear is sensible, warm and suitable except in the case of some of the older girls who are inclined to wear flimsy artificial silk vests all the year round if left to themselves. A note concerning shoes will be found later among the remarks on flatfoot. Excessive clothing is rarely found.

"*Cleanliness.*—Only one child had nits in the hair—a new girl from a very poor home.

"*General Condition.*—38 girls (9.3 per cent.) were found to be noticeably "below par" with regard to their general condition. Four of these were cases of marked debility. Twelve of them were definitely anæmic. This is a higher percentage than last year's—6.4 per cent. The head teacher attributed it to the fact that most of the children seen were those born when war-time diet restrictions were in force. I am told there is also a slight lowering of the intellectual capacity of these children during the first few terms at school, but they pick up again in the upper classes. It is in the upper classes that the pale, thin, highly-strung, studious girl is usually found. I think it is no exaggeration to say that one in every five of the older girls shows evidence of subnormal health. This is due, in my opinion, to several factors, overwork and overstrain; anxiety regarding examinations; puberty; excitement, late hours and consequent insufficiency of sleep (this is most decidedly one of the commonest factors); and ignorance of elementary hygiene. Some health habits—care of teeth, cleanliness of the body, etc., have been taught to them by their parents, but these girls are still ignorant of such important subjects as the necessity for correct diets, regular bowel action, etc. I have appended some notes on "Examinations," and on "Health Teaching" among my concluding remarks, with tentative suggestions for improving this state of affairs.

"General hygienic treatment and tonics were advised in all cases. In a few homework was decreased at the suggestion of the head mistress.

"*Skin Diseases.*—These were found in 2.9 per cent. of all cases, but were none of them serious or contagious. *Acne*, 10 cases; *Psoriasis*, 1; *Lichen planus*, 1. (This is uncommon in children or adolescents. I have never before seen it in school, but the case was unmistakable).

"*External Eye Diseases.*—One case only of blepharitis was seen, and this was under treatment. I did not find a single case of untreated squint.

"*Defective Vision.*—This remains the commonest defect found among secondary school girls. 80 cases were seen, or 19.6 per cent. Of these 24 had not received treatment (5.9 per cent.) while 56 (13.7 per cent.) were wearing suitable spectacles. (These are much the same figures as those for last year—20.8 per cent.; 28 without glasses, 47 with). The girls are beginning to understand the necessity for periodic visits to the oculist, since most of those examined last year told me this time that they had been to have their spectacles checked after my visit. It is only seldom in the secondary schools that I find a severe case of defective vision not corrected by spectacles. Although the girls do not like wearing glasses any more than the younger children in elementary schools do, they have enough sense to understand the importance of preserving their eyesight, and their parents are more careful. The problem of *severe myopia* among older girls is a real one. I found *11 cases* that with glasses read as well as 6/9 or 6/6, but without could only manage R 6/60, L 6/60 or worse. These would therefore without glasses be classed as "partially blind," in an elementary school. In nearly every case I found the girl had planned to become a teacher or a secretary, in other words to continue taxing her eyes to the utmost. Every one of them also confessed that reading was her principal hobby. It is difficult to know how to advise these girls. I recommended them to seek the expert opinion of their own oculists before finally embarking upon a career.

"*Ear Diseases.*—Two cases of otorrhœa were seen, both under treatment and neither severe.

"*Deafness.*—Two girls had minor degrees of deafness, which had followed scarlet fever. In neither case did the condition warrant interference.

"*Tonsils and Adenoids.*—17 cases, or 4.1 per cent. were found, where removal of the tonsils was advisable. In *2 cases* the tonsils were enormous, and immediate treatment was indicated. This percentage is higher than last year's 2.8 per cent. · A large number of children had already had the operation performed during childhood.

"*Mouth Breathing.*—Marked mouth breathing following the operation for adenoids was present in only *one* case. This is in marked contrast to the numbers for elementary schools, and due probably to the parents' more intelligent after care.

"*Glands in Neck.*—Four cases were found with noticeably enlarged glands, and three of them were already under treatment. Slight degrees of enlargement are seen, but not often. (In elementary schools on the other hand slight degrees of enlargement are almost constant).

"*Defective Speech.*—I saw no case of defective articulation or of stammer this year. One girl had a slight lisp.

"*Teeth.*—The condition of the teeth among secondary school girls is very satisfactory compared with those in elementary schools, but this year I found fewer sound sets of teeth than last year when 83 per cent. had perfectly healthy teeth. 27 girls or 6.6 per cent. had three or more decayed. (Elementary schools show 10.72 per cent. with three or more carious). Among these I have noted that three had six decayed, one had seven, and one had nine decayed.

"In addition :—

29 had 2 decayed.
46 had 1 decayed.
8 had very irregular teeth.

So that 73 per cent. had perfectly sound sets, although many of these, of course, showed "stopped" teeth.

"There was no case of pyorrhœa, and no case of unbrushed teeth. Most of the girls visit their dentist once a term for inspection. A few of those with decayed teeth admitted they had postponed seeing the dentist through cowardice. I do not think this would happen if the girls were properly instructed as to the dangers to health and to beauty of leaving carious teeth untreated.

"*Heart Conditions.*—Ten girls, or 2.2 per cent. had cardiac murmurs. *One* of these was presumably functional being associated with anæmia and strictly localised to a small area immediately within the apex.

"Of the other *nine* organic murmurs two gave a definite rheumatic history, two were congenital, and five gave a doubtful history of influenza or scarlet fever. The frequency with which "influenza" is mentioned in these cases makes one wonder if the disease had not really been a mild form of acute rheumatism. Joint pains are often a feature of influenza.

"All the cases except one were already under supervision. Drill and games were forbidden.

"Five or six girls told me they had been forbidden drill by their own doctors because of heart weakness of which I could find no evidence during the examination, but since the family doctor is likely to know more about the child's physical capabilities than anyone else, I have advised seeking his opinion first before resuming strenuous exercises.

"*Lung Diseases.*—Only two cases of definite bronchitis were noted although several girls had slight bronchial catarrh from colds.

"*Enlarged Thyroid.*—Minor degrees of enlargement are common in secondary girls in the upper forms, and are usually physiological in origin.

"Four girls, or 1 per cent. showed definite enlargement, but none had tachycardia or exophthalmos, and did not call for interference although the parents were notified.

"*Deformities.*—(1) *Developmental.*—These are uncommon. I have noted the following :—

Double congenital dislocation of hips ... ... (Walks well and has no pain. Referred to Sir Robert Jones).	1
Left breast much larger than right	1
Accessory Nipple	1
Deflected nasal septum (marked)	1
Rickety Chests	2

"(2) *Functional.*—These are frequent, 15.1 per cent. (Last year 13.3 per cent.)

Postural Scoliosis	8	(9)
Round Shoulders	26	(17)
Flat foot	28	(22)

"All these were referred to the drill mistress for remedial exercises.

"*Flat Foot.*—This condition, which is distressingly common among secondary school girls, and which can cause such trouble in later life if neglected, should, I think, receive more attention than it does in school. Corrective exercises should be given at every drill lesson, and the *reason* for them explained; and the girls should be made to understand the necessity for wearing well made and suitable shoes. The habit of wearing rubber gym. shoes all day in school should be strongly condemned. They cause the feet to perspire, and give no support to the arches. Good comfortable strap slippers (with rubber heels if quietness is essential) can be bought quite cheaply and they wear much better. Outdoor shoes should be "built up" if necessary, and worn parts repaired immediately.

"I think a special circular explaining the disadvantages of continually wearing gym. shoes might be sent to the head mistress, with recommendations regarding more suitable footwear.

"*Other Defects and Diseases.*—I have noted also the following :—

Fæcal fistula, associated with Debility ...	1
Menorrhagia	1
Chorea	1
Adolescent Hypersensitivity	1

These were all advised. The last was a most interesting case. The mother was distressed because her daughter, a girl of fifteen, seemed "difficult," unhappy, irritable, self-contained and introspective. She would burst into tears on the slightest provocation, and nothing that her family could do would distract her from her own imaginary, but terrible troubles. Assured that the condition was temporary only, general tonic treatment was advised, and the girl encouraged to talk. The head mistress arranged a change of class, which was later found to be exactly what was needed. I understand the girl is now very much improved.

"*Concluding Remarks.—Health Teaching.*—In my opinion Hygiene should be taught as a separate subject in every secondary school. It is certainly a most necessary part of the education of the girls who will later be responsible for the health of the next generation. Health habits are usually inculcated at home—but seldom as completely as we would wish. The girl for instance will brush her teeth in the morning because she wishes to look clean and attractive in school, she does not know that it is more necessary for her health's sake to brush them at night as well. Moreover, although she is trained to leave her window open at night she seldom knows the real reason, while the processes of digestion, circulation, excretion, etc., are a complete mystery. She is given quantities of information on fancy subjects, some of which will be useful in after life, much of it only to be forgotten as soon as school time is over. Of Physiology, Hygiene, Mothercraft, Home Nursing, and First Aid—knowledge of which she will need all her life, and which under the present system she can only acquire by painful experience long after she has left school—she is taught nothing at all. It is surely more necessary to know the process of digestion than to know the exports of Australia or the Greek alphabet. We cannot hope to have first class babies (and so a first class nation) if we do not train our future mothers and teachers. Hygiene should be made a compulsory subject in every secondary school, and this could easily be achieved by making it compulsory in every School Certificate and Matriculation examination. The whole course indicated by Sir George Newman in his recent pamphlet on Health teaching can be covered in three years even if only *one* lesson a week is devoted to the subject. I know this because I have recently drawn up experimental schemes of health lessons on these lines.

"*Examinations.*—Although examinations are a necessary part of education and probably will always remain so, at present they are unduly emphasised in school. When girls of fourteen and fifteen (and even younger) are allowed to enter for the School Certificate examination, allowed, that is, to study intensively for several months at a period when they require most of their strength merely to grow, they are bound to suffer for it sooner or later. Apart from the educational defect of such a system, of which I am not qualified to speak, the drain upon the girls' nervous system must be immense. They gain nothing from all this effort but the glory of passing matriculation at a younger age than their mothers did. They are probably not so well fitted to start life as they were. Seventeen I think is early enough to take any school leaving examination, but since the teachers say they must have two years to prepare for Higher Certificate examinations, then sixteen would have to be allowed. In the interest of the girls themselves and of the future nation I think no girl younger than this should be allowed to enter. The spare time could easily be devoted to extra reading, to drill and games, and to Health Teaching. Furthermore a parallel certificate might be taken by the girl with her School Certificate, including Hygiene, Housewifery, Mothercraft, Home Nursing, etc. The advantages of this certificate too, would be that it could be taken even by those girls who did not desire to take the School Certificate."

APPENDIX I.

Some Aspects of Debility in Children.

By Dr. W. J. McIvor.

"Routine medical inspection of school children in general reveals the fact that "debilitated" ones, of some of whom at least it is not possible to assign an obvious cause for their condition, are not infrequently encountered.

"The term "debility" can be applied only too readily to them, a vague definition with which one cannot feel satisfied. but with which when suitably qualified, one may have to be contented in a preliminary report.

"At any rate, the procedure has the merit of indicating some form of early treatment, and may aid in the better understanding of the nature of such disability as a whole. I refer to the desirability of a record of any unusual clinical features discernible both in these subnormal children, and in their school-mates, for the sake of the comparison it affords, and for the necessity ever of controls in any investigation.

"All this involves a painstaking medical examination under varying conditions, trying at times, and one requiring longer time than the period usually allotted to routine school medical inspection.

"A view of the matter calling for comment has recently been advanced that "school medical inspection is after all only an inspection," the suggestion being that the object of it is merely to discover which children show defects and refer them for a future and more detailed clinical examination. Even theoretically this is surely begging the question. Serious ailments can remain undiscovered after superficial examination, with the sufferers unsafely relegated to a limbo of warranted fitness.

"In practice a frequent thorough clinical overhaul can be carried out in circumscribed areas, such as in a borough, but its possibility in a county area where "centres" are relatively few in number, and the factors of time and space magnify the difficulties, is open to question.

"It would seem preferable, in this area at any rate, to make the most of the comparitively few opportunities available, and seek at all times for diatheses and tendencies to disease when not able actually to make a definite diagnosis of the case.

"Justification for the attempt may be found in the teaching of Sir James Mackenzie "of the importance for each one of us, in our little way and in the measure of our opportunities of busying ourselves in the study of the trifling beginnings of ill-health." In this connection it is unfortunate that routine medical inspection is generally limited to children of school age, one great gap among others existing between the time of leaving the infant welfare centre and that of entering school.

"As it is certain clinical features of abnormal health appear at times to be shared by the children of school age referred to in this paper. One of them may be considered under the appropriate bodily system affected.

"*The Muscular System.*—The condition called hypotonia, or tonelessness of the whole muscles of the body is of very common occurrence among them. A range of mild degrees of it is found too among their fellows, who may show no other evidence of weakness, and who are in fact of average health. This is more especially the case among the very young, with whom it would appear to be a functional process, for its presence tends to disappear with growth, and is uncommon at the age of leaving school. It is the more marked type of case of flabby musculature associated with symptoms of ill-health with which we are at present chiefly concerned, although the essential cause of the hypotonia is held by some to be one and the same and amenable to treatment on the same lines. There is a particular point in mentioning this, for aggravation of a mild example of the condition may occur at times and demand the requisite advice. There is also the indication that some other factor is at work among those more seriously affected, but this will be discussed later.

"Dr. Cameron's striking description of a case of hypotonia will bear repetition. "Postural defects because of the "marked loss of tone of the muscles are common. The whole "body droops and sags. Instead of being braced by strong "muscular effort, the body when upright is balanced in the "position of least resistance. The normal postural curves of "the spine are greatly exaggerated. To balance the weight "over the stance, the shoulders are carried far backwards and "the resulting lordosis throws the abdomen into undue "prominence. A secondary curve of compensation in the "cervical region is required to bring the eyes into lines. The "weight of the hanging arms brings the shoulders forward, "and everts the vertibral borders of the scapulae. The feet "are apt to be flat, the knees a little hyperextended. The "child tends to lean against any support that offers, his mother, "a table, the wall. His power of making that sudden move-"ment of recovery, which may be needed to prevent a fall is "very limited. A slight push may be all that is required to "upset his balance.

"Prolonged standing or walking readily produces "fatigue." Personally in addition to noting the presence of the above classical poise, I find another attitude of such children very interesting, and useful in their differentiation; it would indeed appear a more delicate test. The post of the hands when the arms were outstretched is characteristic. It becomes more obvious when the child separates its fingers. The wrist is held in a more or less flexed position, and the metacarpo-phalyngeal joints are extended while the thumb is hyperextended and obducted. (Brain, Warner, etc).

"For a delightful photograph of this peculiar carriage of the hands, see *The Lancet*, March 3rd, 1928, page 439. The picture is one of an exaggeration of a normal posture, and is the result of a hypotonia of antagonistic muscles, in turn a local manifestation of a general hypotonia. (Brain).

"As will be referred to later, the above description of general hypotonia will require modification at times by the grafting on to it of a fibrosing infection. But it may be advisable to allude at this stage to the frequent relation of hypotonia to the disorder known variously as cyclical vomiting, ketanaemia, etc., and to discuss it at some length.

"Dr. Osman says B. M. J., Jan. 26th, 1929, page 150.

"This group forms the bulk of all the cases attending any out-patient department for diseases of children; that it is desired to emphasize the frequency with which it occurs in children of all classes, and not only among the well-to-do, as is commonly taught; and that its minor and major forms appear preventable by the same treatment."

"It is held that this group too constitutes the bulk of school children who are sub-normal in physique. As regards their mentality we find them nervous and highly strung, the element of heredity here entering into the causation.

"Their nervous system, unstable in childhood in general is relatively more so than that of their fellows.

"Thus there is always present some loss of vasomotor tone. The circulating disturbances result in more or less pallor of the face, with dark puffy areas below the eyes. Mothers often enquire the reason of this and the sudden flushing alternating with extreme paleness readily induced by excitement or exertion.

"School attendance officers and head teachers complain of the bad attendances of these children at school.

"Parents however give me an account of attacks of prostration during which to quote their own words, "he is unable to hold his head up, and I simply cannot send him to school at times."

"This history of sudden "bouts," of limpness, is very typical of the condition, and whether corroborated by clinical signs or not must be accepted with due sympathy and encouragement, fortified by the knowledge of its veracity, and on high authority of the power in many cases to help in their prevention.

"In the more marked cases of ketonaemia, "bilious" attacks occur at regular intervals after a period of well-being accompanied by excessive vomiting, but there may be none of the latter and only nausea.

"Another symptom commonly found is the loss of weight, sometimes great and rapid. Muscular pains too at times are complained of whatever the cause, whether due to abnormal stresses from a faulty position, or from an accompanying rheumatic infection (Osman, etc.) Abdominal tenderness and pain, usually brief, constant yawning or sighing, foul breath, excessive perspiration and dyspnoea on exertion, giddiness or faintness on rising in the morning, a persistent irregularity of the temperature chart are regularly alluded to by mothers—(Cameron).

"The causation of the above group of symptoms is now generally associated with the presence of an acidosis, though the exact nature of its production would seem to be in dispute. The acidosis in turn is held to be due to the imperfect combustion of fats, and that complete combustion of fats cannot occur without the presence of the requisite amount of sugar in the body. The carbohydrates must balance the fats to effect the perfect oxidation of the latter. When either the the sugar is scanty or the fat superabundant, the fats are imperfectly broken down and acidosis results.

"While this explanation of the faulty metabolism and production of acidosis in children suffering from cyclical vomiting associated with debility may be accepted in the main, the factor of an underlying infection must be taken always carefully into account (Cameron), *e.g.*, the return of the attack is often determined by the existence of persistent sepsis in the naso-pharynx and that on the other hand almost any form of infection may pass unrecognised through being masked by the familiar symptoms of the usual attack. That it may be difficult to decide too if an infection is the result of acidosis and not the cause of it.

"Excluding typical attacks of cyclical vomiting Dr. Reginald Miller expresses the view that acidosis may be due to an intestinal toxaemia requiring different treatment in dealing with it.

"Osman and others are convinced, from a trial of it over a long series of cases, that the addition of sugar to the diet will prevent or curtail the incidence of acidosis.

"Cameron advises the curtailment of fats, especially the cream of cow's milk, in the diet, in addition to the abundant supply of carbohydrates, and various sugars, but particularly of glucose to it, and also at times the administration of alkalies such as bicarbonate of soda.

"Others have counselled caution in the indiscriminate advocacy of cod liver oil, and it is only right to deprecate its use in the case of obviously amyotonic children with history of symptoms suggesting a tendency to acidosis or in the case of others showing an intolerance for cod-liver oil in particular and fatty foods in general.

"It is difficult to foresee any untoward results accruing from the pursuit of some such treatment on selected cases of acidosis as is outlined above, and it seems worthy of the more extended trial that is being given it.

"Bearing on the subject, some one recently remarked that there was much to be said for the rôle of the tuck-shop in supplementing a diet deficient in carbohydrate by providing a suitable supply of it in a soluble and rapidly assimilable form. This might be true with certain provisoes, one being that the youthful purchasers must, if they are of the type under survey, confine their attention to such articles as barley sugar, maple sugar, sugar candy or boiled sweets, and avoid chocolate and other sweets that are rich in fat. But then again one must sound a note of warning.

"Great care must be exercised in the care of the teeth if sugar is to be consumed in various forms and at irregular intervals, a procedure especially prone to produce caries. Dr. Chalmers, (B. M. J., February 9th, 1929), comments on the view held by Professor Vining, of Leeds, as to the pre-rheumatic child being a case of toxic debility, and on his hearty support of the well-balanced diet from infancy onwards that the latter long has advocated in the prevention and control of rheumatism. He is opposed to the view that a mere addition of sugar to the diet could achieve the same results, or have any appreciable effect on the intestinal toxaemia of these debilitated children, that further bio-chemical investigation may reveal the missing links in the chain of the disordered metabolism, that the problem involves further knowledge of the intestinal hepatic chemistry, the part of the blood and its calcium contents and includes also the thyroid-parathyroid mechanism of defence of the body.

"My own experience leads me to stress the frequent association of amyotonic conditions among school children with definite rheumatic features.

"Hypotonic children, for instance, often show evidence of a more or less latent Sydenham's chorea, or a general tonelessness of the muscles may co-exist at times but not invariably with signs of the presence of a fibrosing infection. Thus in the same individual, besides a general hypotonia, a marked rigidity of the spine, due to some active process, and not merely the result of loss of muscular tone, may accompany some involvement of the valves and muscle of the heart in the sclerosing effect.

"In such a situation there are obviously grave grounds for the fear that the process may be of a progressive nature.

"What evidence on the other hand can we produce for the hope that the infection may be amenable to treatment and capable of arrest if not of absolute cure.

"Here at least I can give my own observations on the subject over a term of years.

"Whether the outcome of appropriate measures or of merely a fortuitous and fortunate natural healing effect, a factor difficult to exclude, one may see with the passage of time the fading away or even the total disappearance on occasions of the spinal rigidity and errors of posture recorded at a previous medical examination. The heart shares in the general improvement of health.

"As regards the cardiac lesion most frequently encountered in children, endocarditis of the mitral valve with hypertrophy or dilatation of the heart in varying degree, I have personally noted that the majority after a number of years while still possessing the typical systolic murmur will generally, though not invariably, show an appreciable lessening in the size of the heart, or it even may be quite normal in size at times.

"A presystolic murmur may be audible now and appear to supplant while it confirms the accuracy of the history of a former hypertrophy, a better omen than when accompanied still by evidence of enlargement of the heart.

"The latter combination, fortunately comparatively rare, may warrant a guarded prognosis.

"What does the future hold in store for such of these children as already show improvement in health in general and particularly of the cardiac muscle in early life?

"Can we hope that the lesion of the mitral valve will not advance to a crippling stenosis?

"Can the subjects grow up into as useful citizens as they are often the most bright and willing children with both brains and a lovable disposition?

"My considered opinion is that with all due care exercised in their youth, with personal knowledge of certain limitations, and with the adoption of suitable careers, that they are sufficiently well equipped to fight the battle of life for the average span of years."

W. J. McIvor.

April 13th, 1929.

APPENDIX II.

STATISTICAL TABLES.

Public Elementary Schools.

Table I.—Return of Medical Inspections.

(A.) Routine Medical Inspection.

Number of Code Groups Inspections—	
Entrants	6238
Intermediates	6557
Leavers	4969
Total	17764
Number of Other Routine Inspections	625

(B.) Other Inspections.

Number of Special Inspections	*6492
Number of Re-inspections	2809
Total	9301

* This figure includes examinations by Doctors at Eyesight and Minor Ailment Clinics, examinations as to suitability for open air swimming and for Employment Certificates.

Table II.

(A.) Return of Defects found by Medical Inspection in the year ended 31st December, 1928.

DEFECT OR DISEASE.	Routine Inspections.	Special Inspections.
	No. of Defects requiring Treatment.	No. of Defects requiring Treatment.
MALNUTRITION	54	7
UNCLEANLINESS	896	91
SKIN—		
Ringworm—		
Scalp	16	79
Body	2	63
Scabies	12	50
Impetigo	120	1119
Other Diseases (Non-Tuberculous)	62	76
EYE—		
Blepharitis	130	134
Conjunctivitis	7	42
Keratitis	–	11
Corneal Opacities	4	76
Defective Vision (excluding Squint)	1268	1530
Squint	83	363
Other Conditions	8	112
EAR—		
Defective Hearing	82	25
Otitis Media	83	38
Other Ear Disease	1	41
NOSE AND THROAT—		
Enlarged Tonsils only	350	29
Adenoids only	243	40
Enlarged Tonsils & Adenoids	479	33
Other Conditions	77	12
ENLARGED CERVICAL GLANDS (Non-Tuberculous)	79	6
DEFECTIVE SPEECH	45	11
TEETH—Dental Diseases	1197	55
HEART AND CIRCULATION—		
Heart Disease—		
Organic	107	17
Functional	11	1
Anæmia	185	18
LUNGS—		
Bronchitis	86	7
Other Non-Tuberculous Disease	14	5
TUBERCULOSIS—		
Pulmonary—		
Definite	–	–
Suspected	27	8
Non-pulmonary—		
Glands	17	5
Spine	–	–
Hip	3	–
Other Bones and Joints	2	–
Skin	5	4
Other Forms	9	4
NERVOUS SYSTEM—		
Epilepsy	5	3
Chorea	11	5
Other Conditions	2	2
DEFORMITIES—		
Rickets	54	1
Spinal Curvature	86	1
Other Forms	24	2
OTHER DEFECTS AND DISEASES	214	68

Table II.

(B.) Number of individual Children found at Routine Medical Inspection to require Treatment (excluding Uncleanliness and Dental Diseases).

	Number of Children.		Percentage of Children found to require Treatment.
	Inspected.	Found to require Treatment.	
Code Groups—			
Entrants	6238	1377	22·0
Intermediates ...	6557	1408	21·4
Leavers	4969	1009	20·3
Total (Code Groups) ...	17764	3794	21·3
Other Routine Inspections	625	141	22·5

TABLE III.—Return of all Exceptional Children in the Area.

			Boys.	Girls.	Total.
BLIND (including partially blind).	(1) Suitable for training in a School or Class for the totally blind ...	Attending Certified Schools or Classes for the Blind ...	11	6	17
		Attending Public Elementary Schools	—	—	—
		At other Institutions ...	—	—	—
		At no School or Institution ...	3	6	9
	(2) Suitable for training in a School or Class for the partially blind	Attending Certified Schools or Classes for the Blind ...	2	3	5
		Attending Public Elementary Schools	17	19	36
		At other Institutions ...	—	—	—
		At no School or Institution ...	6	2	8
DEAF (including deaf and dumb and partially deaf).	(1) Suitable for training in a School or Class for the totally deaf or deaf and dumb ...	Attending Certified Schools or Classes for the Deaf ...	15	11	26
		Attending Public Elementary Schools	1	1	2
		At other Institutions ..	—	—	—
		At no School or Institution ...	4	1	5
	(2) Suitable for training in a School or Class for the partially deaf	Attending Certified Schools or Classes for the Deaf ...	3	3	6
		Attending Public Elementary Schools	12	11	23
		At other Institutions ...	—	—	—
		At no School or Institution ...	1	—	1
MENTALLY DEFECTIVE.	(1) Feeble-minded (cases not notifiable to the Local Control Authority).	Attending Certified Schools for Mentally Defective Children..	19	8	27
		Attending Public Elementary Schools	184	140	324
		At other Institutions ...	—	—	—
		At no School or Institution ...	21	16	37
EPILEPTICS.	Suffering from severe epilepsy -	Attending Certified Special Schools for Epileptics ...	3	1	4
		In Institutions other than Certified Special Schools ...	—	—	—
		Attending Public Elementary Schools	3	2	5
		At no School or Institution ...	5	3	8
	Suffering from epilepsy which is not severe ...	Attending Public Elementary Schools	23	19	42
		At no School or Institution ...	—	—	—
PHYSICALLY DEFECTIVE.	Infectious pulmonary & glandular tuberculosis ...	At Sanatoria or Sanatorium Schools approved by the Ministry of Health or the Board	27	22	49
		At other Institutions ...	—	—	—
		At no School or Institution ...	8	10	18
	Non-infectious but active pulmonary and glandular tuberculosis ...	At Sanatoria or Sanatorium Schools approved by the Ministry of Health or the Board	15	7	22
		At Certified Residential Open-Air Schools	—	—	—
		At Certified Day Open-Air Schools	—	—	—
		At Public Elementary Schools...	35	23	58
		At other Institutions ...	—	—	—
		At no School or Institution ...	15	16	31

TABLE III.—continued.

			Boys.	Girls.	Total.
PHYSICALLY DEFECTIVE.	Delicate children (*e.g.* pre-or latent tuberculosis, malutrition, debility, anæmia, &c.) ...	At Certified Residential Open-Air Schools	18	14	32
		At Certified Day Open-Air Schools	—	—	—
		At Public Elementary Schools ...	366	483	849
		At other Institutions ...	—	—	—
		At no School or Institution ...	16	19	35
	Active non-pulmonary tuberculosis ...	At Sanatoria or Hospital Schools approved by the Ministry of Health or the Board ...	23	14	37
		At Public Elementary Schools ...	35	31	66
		At other Institutions ...	—	—	—
		At no School or Institution ...	5	2	7
	Crippled Children (other than those with active tuberculosis disease) *e.g.* children suffering from paralysis, &c., and including those with severe heart disease ..	At Certified Hospital Schools	3	2	5
		At Certified Residential Cripple Schools	1	—	1
		At Certified Day Cripple Schools...	—	—	—
		At Public Elementary Schools ...	171	201	372
		At other Institutions	—	—	—
		At no School or Institution ...	11	19	30

Table IV.—Return of Defects Treated during the year ended 31st December, 1928.

Treatment Table.

Group I.—Minor Ailments (excluding Uncleanliness, for which see Group V).

Disease or Defect. 1	Number of Defects Treated, or under Treatment during the year.		
	Under the Authority's Scheme. 2	Otherwise. 3	Total. 4
SKIN—			
Ringworm—Scalp ...	73	12	85
Ringworm—Body	63	4	67
Scabies	48	6	54
Impetigo	1133	78	1211
Other Skin Diseases ...	79	49	128
MINOR EYE DEFECTS ... (External and other, but excluding cases falling in Group II.)	218	53	271
MINOR EAR DEFECTS ...	94	58	152
MISCELLANEOUS ... (*e.g.* Minor injuries, bruises, sores, chilblains, etc.)	760	61	821
Total ...	2468	321	2789

Group II.—Defective Vision and Squint (excluding Minor Eye Defects Treated as Minor Ailments—Group I.).

Disease or Defect. 1	Number of Defects dealt with.			
	Under the Authority's Scheme. 2	Submitted to Refraction by Private Practitioner or at Hospital apart from Authority's Scheme. 3	Otherwise. 4	Total. 5
Errors of Refraction (including Squint). Operations for Squint should be recorded separately in body of Report	2560	89	82	2731
Other Defect or Disease of the Eyes (excluding those recorded in Group I.) ...	434	—	—	434
Total ...	2994	89	82	3165

Total number of Children for whom Spectacles were prescribed—

(*a*)	Under Authority's Scheme ...	1535
(*b*)	Otherwise	141

Total number of Children who obtained or received Spectacles—

(*a*)	Under Authority's Scheme ...	1022
(*b*)	Otherwise	217

Group III.—Treatment of Defects of Nose and Throat.

NUMBER OF DEFECTS.				
Received Operative Treatment.				
Under the Authority's Scheme, in Clinic or Hospital. 1	By Private Practitioner or Hospital, apart from Authority's Scheme. 2	Total. 3	Received other forms of Treatment. 4	Total Number Treated. 5
610	79	689	208	897

Group IV.—Dental Defects.

(1) Number of Children who were

(a) Inspected by the Dentist :—

	Aged			Total.
Routine age Groups	5	...	2785	
	6	..	4449	
	7	...	4699	
	8	...	4695	
	9	...	3030	
	10	...	1959	
	11	...	1516	
	12	...	628	
	13	...	62	
				23823
Specials	...	...	...	476
				24299

(b) Found to require Treatment				15825
(c) Actually Treated				9184
(d) Re-treated during the year as the result of periodical Examination				33
(2) Half-days devoted to Inspection		813	Total	2134
„ „ Treatment		1321		
(3) Attendances made by Children for Treatment				12079
(4) Fillings—	Permanent Teeth	2600	Total	5531
	Temporary Teeth	2931		
(5) Extractions—	Permanent Teeth	677	Total	20768
	Temporary Teeth	20091		
(6) Administrations of general Anæsthetics for Extractions				—
(7) Other Operations (Silver Dressings)—				
	Permanent Teeth	627	Total	1348
	Temporary Teeth	721		
Scalings				475
Gum Dressings				174

Group V.—Uncleanliness and Verminous Conditions.

(1) Average number of visits per School made during the year by School Nurses	7
(2) Total number of Examinations made of Children in the Schools by School Nurses	154606
(3) Number of individual Children found unclean	2493
(4) Number of Children cleansed under arrangements made by the Local Education Authority	—
(5) Number of Cases in which Legal Proceedings were taken—	
(a) Under the Education Act, 1921	—
(b) Under School Attendance Bye-Laws	—

APPENDIX III.—STATISTICAL TABLES.

Secondary Schools.

TABLE I.—Shewing Number of Children Examined at Different Ages.

															Total.
Ages	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
Boys	—	—	3	30	58	65	160	342	150	60	100	128	44	27	1167
Girls	—	—	56	38	36	74	161	254	86	30	51	68	45	21	920
Totals	—	—	59	68	94	139	321	596	236	90	151	196	89	48	2087

Secondary Schools

Table II.—Shewing Nature of Defects referred to for Treatment and cases where Defects were Remedied.

DEFECT OR DISEASE.	Referred for Treatment.	Received Treatment.
MALNUTRITION	1	1
UNCLEANLINESS—		
Head	15	15
Body	—	—
SKIN—		
Ringworm—		
Head	—	—
Body	—	—
Scabies	—	—
Impetigo	1	1
Other Disease	16	7
EYE—		
Defective Vision or Squint	148	115
External Eye Disease	10	9
EAR—		
Defective Hearing	3	3
Ear Disease	6	3
TEETH—		
Dental Disease	164	118
NOSE AND THROAT—		
Enlarged Tonsils	18	9
Adenoids	6	4
Defective Speech	1	1
Tonsils and Adenoids	10	7
Other Conditions	12	10
HEART AND CIRCULATION—		
Heart Disease—		
Organic	19	17
Functional	4	4
Anæmia	37	23
LUNGS—		
Pulmonary Tuberculosis—		
Definite	—	—
Suspected	—	—
Chronic Bronchitis	—	—
Other Disease	2	1
NERVOUS SYSTEM—		
Epilepsy	—	—
Chorea	2	1
Other Disease	—	—
NON-PULMONARY TUBERCULOSIS—		
Glands	—	—
Bones and Joints	—	—
Spine	—	—
Hip	—	—
Other Forms	—	—
Rickets	2	—
Deformities—Spinal Curvature	41	32
Other Forms	33	24
OTHER DEFECTS OR DISEASES	25	17